### PATENT COOPERATION TREATY

### From the INTERNATIONAL BUREAU

NOTIFICATION OF TRANSMITTAL OF COPIES OF TRANSLATION OF THE INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OR CHAPTER II OF THE PATENT COOPERATION TREATY)

(PCT Rules 44bis.3(c) and 72.2)

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**ALLEMAGNE** 

Patentanwälte

18. MAI 2006

Date of mailing (day/month/year) 11 May 2006 (11.05.2006)	[FRSt;
Applicant's or agent's file reference 30024P WO	IMPORTANT NOTIFICATION
International application No. PCT/EP2004/006180	International filing date (day/month/year) 08 June 2004 (08.06.2004)
Applicant C	NOTHIS HOLDING AG et al

<ol> <li>Transmittal of the translation to the</li> </ol>
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<b>V</b>	The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

Yolaine Cussac

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## PATENT COOPERATION TREATY

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 30024P WO	FOR FURTHER ACTION	See item 4 below		
International application No. PCT/EP2004/006180	International filing date (day/month/year) 08 June 2004 (08.06.2004)	Priority date (day/month/year) 11 June 2003 (11.06.2003)		
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237				
Applicant GNOTHIS HOLDING AG				

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis. 1(a).			
2.	This REPORT consists of a total of 8 sheets, including this cover sheet.  In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.			
3.	This report contains indications relating to the following items:			
	Box No. I	Basis of the report		
	Box No. II	Priority		
	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability		
	Box No. IV	Lack of unity of invention		
	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
	Box No. VI	Certain documents cited		
	Box No. VII	Certain defects in the international application		
	Box No. VIII	Certain observations on the international application		
4.		ommunicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but makes an express request under Article 23(2), before the expiration of 30 months from the priority		

	Date of issuance of this report 01 May 2006 (01.05.2006)	
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer  Yolaine Cussac	
Facsimile No. +41 22 740 14 35	Telephone No. +41 22 338 70 80	

Form PCT/IB/373 (January 2004)

### PATENT COOPERATION TREATY

Translation From the INTERNATIONAL SEARCHING AUTHORITY PCT WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1) Date of mailing (day/month/year) Applicant's or agent's file reference FOR FURTHER ACTION 30024P WO See paragraph 2 below International application No. International filing date (day/month/year) Priority date (day/month/year) PCT/EP2004/006180 08.06.2004 11.06.2003 International Patent Classification (IPC) or both national classification and IPC Applicant EVOTEC TECHNOLOGIES GMBH This opinion contains indications relating to the following items: Box No. I Basis of the opinion Box No. II Priority Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability Box No. IV Lack of unity of invention Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial Box No. V applicability: citations and explanations supporting such statement Box No. VI Certain documents cited Box No. VII Certain defects in the international application Box No. VIII Certain observations on the international application **FURTHER ACTION** If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220. For further details, see notes to Form PCT/ISA/220. Name and mailing address of the ISA/EP Authorized officer Facsimile No. Telephone No.

International application No.
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Box	x No. I	Basis of this opinion
1.	With	h regard to the language, this opinion has been established on the basis of the international application in the language in which it was d, unless otherwise indicated under this item.
		This opinion has been established on the basis of a translation from the original language into the following language . which is the language of a translation furnished for the purposes of international search (under
	•	Rule 12.3 and 23.1(b)).
2.	With inve	h regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed action, this opinion has been established on the basis of:
	a.	type of material
		a sequence listing
		table(s) related to the sequence listing
	Ь.	format of material
		in written format
		in computer readable form
	c.	time of filing/furnishing
		contained in the international application as filed.
		filed together with the international application in computer readable form.
		furnished subsequently to this Authority for the purposes of search.
3.		In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4.	Add	litional comments:
,		
,		

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Bo	x No. II	l Priority	
1.	$\boxtimes$	The following document has not yet been furnished:	
	ļ	copy of the earlier application whose priority has been claimed (Rule 43bis.1 and	66.7(a)).
	ļ	translation of the earlier application whose priority has been claimed (Rule 43bis.	1 and 66.7(b)).
	1	Consequently it has not been possible to consider the validity of the priority claim. This the assumption that the relevant date in the claimed priority date.	opinion has nevertheless been established on
2.	ш	This opinion has been established as if no priority had been claimed due to the fact t (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing relevant date.	hat the priority claim has been found invalid g date indicated above is considered to be the
3.	Addit	tional observations, if necessary:	
			•

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Box			ale 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; oporting such statement	
1.	Statement			
	Novelty (N)	Claims	9, 14, 18-20	YES
		Claims	1-8, 10-13, 15-17, 21-23	NO
	Inventive step (IS)	Claims	9	YES
		Claims	1-8, 10-23	NO
	Industrial applicability (IA)	Claims	1-23	YES
		Claims		NO

2. Citations and explanations:

Reference is made to the following document D1: D1: BioTechniques, Volume 22, 1997, pages 1140-1145, (Rudert W.A. et al.).

1. NOVELTY

Claims 1-8, 10-13, 15-17 and 21-23 do not meet the requirements of PCT Article 33(2), for the following reasons:

- 1.1 D1 discloses a double-labeled fluorescent
   oligonucleotide probe which has all of the
   features of present claim 1 (see abstract and fig.
  5, in particular lines 5-6 in the legend of fig.
  5). The subject matter of this claim is therefore
   not novel under PCT Article 33(2).
- 1.2 Dependent claims 2-8 and 10-12 are also not novel because the additional features of these claims have likewise been disclosed by D1 (see legend of fig. 5).
- 1.3 D1 also discloses uses with all of the features of

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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

present claims 13 and 15-17 (see abstract and figs. 3-5).

- 1.4 D1 discloses detection methods with all of the features of present claims 21-23 (see abstract and figs. 3-5).
- 2. INVENTIVE STEP

Present claims 14 and 18-20 do not appear to involve an inventive step under PCT Article 33(3), for the following reasons:

- 2.1 In view of the lack of clarity mentioned under point 4.1, present **claim 14** does not contain any technical feature that might substantiate the presence of an inventive step in this claim.
- 2.2 The additional features of claims 18-20 are obvious standard modifications routinely used by a person skilled in the art and can therefore not be considered inventive.
- 2.3 Present claim 9, however, appears to involve an
  inventive step, for the following reasons:

The subject matter of present claim 9 differs from the double-labeled fluorescent oligonucleotide probe of document D1 which is considered closest prior art in that the two fluorescent labels M and M' are identical. This difference enables the fluorescent oligonucleotide probe labeled in this

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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

way to be detected with higher sensitivity. The technical problem addressed by claim 9 can therefore be considered that of providing an improved oligonucleotide probe which can be detected with greater sensitivity. Since the available prior art does not appear to give any indication of the double labeling of oligonucleotide probes with two identical fluorescent labels, claim 9 appears to involve an inventive step (PCT Article 33(3)).

- 3. INDUSTRIAL APPLICABILITY
- 3.1 The subject matter of **claims 1-23** appears to be industrially applicable and consequently meets the requirements of PCT Article 33(4).
- 4. FURTHER OBSERVATIONS
- 4.1 Claim 14 does not meet the requirements of PCT Article 6 because the subject matter for which protection is sought is not clearly defined. The claim attempts to define the subject matter in terms of the result to be achieved ("concentration of the analyte to be detected...≤10<sup>-9</sup> M"), but in doing so merely states the problem to be solved without providing the technical features necessary for achieving this result.
- 4.2 The applicant is invited to furnish modifications in the form of replacement sheets, to clearly indicate therein the amendments made and to state

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Box No. V Reasoned statement under Rule 43bis.I(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement those passages of the originally filed application = on which these amendments are based (PCT Article That ... 34(2)(b), last sentence; PCT Rule 66.8). Without this information, the amendments furnished need not be taken into account for the purposes of the international preliminary examination.